

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/051371

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04R7/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 1 699 786 A (GOLDSBOROUGH THADDEUS R) 22 January 1929 (1929-01-22)	1-9
X	the whole document	10
A	PATENT ABSTRACTS OF JAPAN vol. 0030, no. 28 (E-096), 9 March 1979 (1979-03-09) -& JP 54 006523 A (HITACHI LTD), 18 January 1979 (1979-01-18) cited in the application abstract figures 1,3	1-10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

15 November 2004

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22/11/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 0061, no. 28 (E-118), 14 July 1982 (1982-07-14) & JP 57 053198 A (TOSHIBA CORP), 30 March 1982 (1982-03-30) abstract -----	1,5,6,10
A	EP 0 914 020 A (NOKIA TECHNOLOGY GMBH) 6 May 1999 (1999-05-06) cited in the application abstract paragraph '0010! - paragraph '0013!; figure 1 -----	1,5,10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/051371

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 1699786	A	22-01-1929	NL 25055 C	
JP 54006523	A	18-01-1979	NONE	
JP 57053198	A	30-03-1982	NONE	
EP 0914020	A	06-05-1999	DE 19747955 A1	06-05-1999
			EP 0914020 A2	06-05-1999